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NASA Procedural Requirements

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2021**COMPLIANCE IS MANDATORY FOR NASA EMPLOYEES**

NASA Sustainable Acquisition

Responsible Office: Environmental Management Division

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Preface

P.1 Purpose

This NASA Procedural Requirement (NPR) describes requirements, responsibilities, program implementation, and associated reporting expectations for sustainable acquisition (or green purchasing) at NASA facilities to comply with regulations, Executive Orders (E.O.s), and Agency policies.

P.2 Applicability

- a. This directive is applicable to NASA Headquarters and NASA Centers, including Component Facilities and Technical and Service Support Centers. This directive applies to the Jet Propulsion Laboratory (JPL), a Federally Funded Research and Development Center (FFRDC), and other contractors only to the extent specified or referenced in applicable contracts.
- b. In this directive, all mandatory actions (i.e., requirements) are denoted by statements containing the term "shall." The terms: "may" or "can" denote discretionary privilege or permission, "should" denotes a good practice and is recommended, but not required, "will" denotes expected outcome, and "are/is" denotes descriptive material.
- c. In this directive, all document citations are assumed to be the latest version unless otherwise noted.

P.3 Authority

- a. The National Aeronautics and Space Act, 51 U.S.C. § 20113(a).
- b. Planning for Federal Sustainability in the Next Decade, E.O. 13693, 80 Federal Register (Fed. Reg.) 57, 15871 (March 25, 2015).
- c. NASA Policy Directive (NPD) 1000.3, The NASA Organization.
- d. NPD 1000.0, NASA Governance and Strategic Management Handbook.
- e. NPD 1001.0, NASA Strategic Plan.
- f. NPD 8500.1, NASA Environmental Management.

P.4 Applicable Documents and Forms

- a. Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace, NASA FAR Supplement, 48 CFR pt. 1823.
- b. NPR 8553.1, NASA Environmental Management System.
- c. NASA Form (NF) 1707 -- Special Approvals and Affirmations of Requisitions.

P.5 Measurement/Verification

- a. NASA's status is reported to the Office of Management and Budget (OMB) and the Council on Environmental Quality (CEQ) in accordance with OMB and CEQ measurement guidelines.
- b. NASA's Environmental Management Division (EMD) and Office of Procurement will coordinate and compile the data necessary to submit NASA's required reports. Agency effectiveness is evaluated under:
 - (1) The OMB Scorecard on Sustainability/Energy.
 - (2) NASA's Strategic Sustainable Performance Plan (SSPP).
 - (3) Procurement Management Review (PMR).
 - (4) Environmental and Energy Functional Review (EEFR).

P.6 Cancellation

NPR 8530.1A, Affirmative Procurement Program and Plan for Environmentally Preferable Products, dated June 4, 2004.

Chapter 1. Sustainable Acquisition

1.1 Introduction

NASA tries to execute its mission using the least amount of resources. This policy aligns with E.O. 13693, NASA directives, procedural requirements, and guidance documents. Sustainable acquisition (formerly known as affirmative procurement) requires Federal agencies to buy recycled content, biobased, and other environmentally preferable products as appropriate.

1.2 Goal

NASA's acquisition process aims to effectively support programs and projects in meeting their commitments. By implementing sustainable acquisition, NASA manages risks to its mission and to the environment. NASA's acquisition approach involves NASA employees and those entities supporting NASA employees. All purchases have an environmental impact resulting from a product's manufacture, delivery, use, and disposal. By purchasing environmentally preferable products and services, NASA reduces its negative environmental impacts.

1.3 Sustainable Products and Services

1.3.1 Per E.O. 13693, all Federal agencies are required to promote sustainable acquisition by applying the following environmental performance and sustainability factors:

- a. Purchasing recycled content products designated by the Environmental Protection Agency (EPA).
- b. Using energy- and water-efficient products and services, such as ENERGY STAR qualified and Federal Energy Management Program (FEMP)-designated products.
- c. Using biopreferred and biobased products designated by the United States Department of Agriculture (USDA).
- d. Switching to Significant New Alternative Policy (SNAP) chemicals or other alternatives to minimize ozone-depletion and global-warming.
- e. Using WaterSense certified/water-efficient equipment.
- f. Using Safer Choice--labeled chemical products.
- g. Using SmartWay Transport partners and SmartWay products.

1.3.2 The Green Procurement Compilation <https://sftool.gov/greenprocurement> resource helps users identify green products and services. Appendix B also contains additional useful Web site links.

Chapter 2. Responsibilities

2.1. Overview

Responsibilities of NASA senior management are established in NPD 1000.0, NPD 1000.3, and NPR 8553.1.

2.2 Mission Support Office

2.2.1 The Associate Administrator, Mission Support Directorate, shall:

- a. Promote NASA's sustainable acquisition program.
- b. Advocate for investments and methods to meet Agency sustainable acquisition goals.
- c. Ensure that each Center has an effective sustainable acquisition program.

2.3 Agency Chief Sustainability Officer

2.3.1 The Agency Chief Sustainability Officer (CSO), Assistant Administrator Office of Strategic Infrastructure (OSI) shall:

- a. Advocate for investments and methods to promote Agency sustainable acquisition goals.
- b. Provide policies and guidance that support Agency personnel in executing sustainable acquisition.
- c. Report on performance as required by CEQ and OMB.

2.4 Agency Environmental Management Division

2.4.1 The Agency Environmental Management Division (EMD) shall:

- a. Develop Agency-wide processes to promote sustainable acquisition.
- b. Integrate sustainable practices across programs, projects, and activities.
- c. Monitor NASA's performance in implementing sustainable acquisition.
- d. Compile the data required to complete annual Agency sustainable acquisition reporting in cooperation with the Office of Procurement.

2.5 NASA Office of Procurement

2.5.1 The Office of Procurement shall:

- a. Promote sustainable acquisition.
- b. Compile the data required to complete annual Agency sustainable acquisition reporting in

cooperation with the EMD.

c. Promote sustainable acquisition training for contracting professionals and Contracting Officer Representatives.

2.6 Center Director

2.6.1 Center Directors shall:

a. Advocate, engage, and enforce Agency and Center-level initiatives to support sustainable acquisition.

b. Monitor Center's performance in meeting Center sustainable acquisition targets per OMB and CEQ measurement guidelines.

c. Promote sustainable acquisition for all applicable Center procurements.

d. Resolve disputes regarding whether a procurement should or should not include sustainable items or whether the appropriate waivers and supporting documentation has been completed.

2.7 Center Offices of Procurement

2.7.1 Center Offices of Procurement shall:

a. Promote sustainable acquisition by ensuring environmental performance and sustainability factors are screened in all applicable procurements, including new contract actions, Indefinite Delivery, Indefinite Quantity (IDIQ) contracts, task orders against existing contracts, and goods and/or services acquired through purchase cards.

b. Use the established procedures in the NASA FAR Supplement (NFS) 1823 to screen every acquisition to determine if any sustainable acquisition program applies. If one or more program applies, then the contracting officer will include the appropriate clauses in the solicitation.

c. Record sustainable acquisition activity in the Federal Procurement Data System (FPDS).

d. Ensure that required NF 1707 documentation is attached to applicable contract documents.

e. Ensure procurement requirements comply with Center environmental management systems as prescribed in NPR 8553.1.

f. Submit sustainable acquisition data required under OMB and CEQ measurement guidelines to the NASA Office of Procurement.

2.8 Center or Component Facility Environmental Managers

2.8.1 The Center or Component Facility Environmental Manager shall:

a. Assist Request Originators and the Center Office of Procurement in determining whether sustainable products and services apply to procurement actions.

b. Ensure the accuracy of Center sustainable acquisition data submitted through the NASA

Environmental Tracking System (NETS).

2.9 Center or Component Facility Energy Managers

The Center or Component Facility Energy Manager shall: Approve or deny exemption requests regarding the procurement of ENERGY STAR or FEMP-designated products per NFS 1823.

2.10 Request Originators

2.10.1 The Request Originator shall:

- a. Screen project requirements for inclusion of applicable sustainable products and services. The Green Procurement Compilation (GPC) tool can be used to help identify applicable Federal green/sustainable acquisition requirements.
- b. Incorporate applicable sustainable products and service requirements into technical standards, specifications, Statements of Work (SOW), Performance Work Statements (PWS), and/or Statements of Objectives (SOO).
- c. Complete NASA Form 1707, Special Approvals and Affirmations of Requisitions, Section 2. Include the appropriate justification documentation if not including sustainable acquisition requirements as required.
- d. Ensure procurement requirements comply with the Center or Component Facility's environmental management system as prescribed in NPR 8553.1.

Chapter 3. Implementation

3.1 Documentation

The Request Originator starts the sustainable procurement process by developing relevant documents such as: market research reports, SOW, SOO, PWS, NASA Form 1707, Center-specific procurement documentation, and, if applicable, exemption justifications.

3.2 NASA Form 1707 (NF 1707)

3.2.1 Per NFS 1823, the Request Originator shall review Federal sustainable acquisition requirements and document whether they apply to the procurement, how the procurement complies, or if a waiver is required.

3.2.2 Waiver (Justification Documentation) Process. A justification document exempts the Request Originator from acquiring specific sustainable products and/or services. The Request Originator shall clearly document the factors supporting an exemption request and attach all documentation associated with the exemption to the NF 1707.

a. Per E.O. 13693, an exception is available if any of the following conditions exist:

(1) The product or service cannot be acquired competitively within a reasonable performance schedule.

(2) A product or service cannot be acquired that meets reasonable performance requirements.

(3) The product or service cannot be acquired at a reasonable price. The price shall be deemed unreasonable when the total life-cycle costs for the sustainable product or service are significantly higher than the nonsustainable product or service. Life-cycle costs are determined by combining the initial costs of a product or service with any additional costs or revenues generated from that product or service during its entire life. On a case by case basis, NASA may elect to specify the purchase of sustainable products or services which may be up to 10 percent more costly than conventional products or services.

b. When cost is the basis of the exception, the Request Originator shall clearly identify and document the difference in costs between the sustainable product or service and the nonsustainable product or service.

c. Per NFS 1823 regarding ENERGY STAR or FEMP-designated products, the Center or Component Facility Energy Manager has been delegated the authority to make the exemption determination.

3.3 Micro-Purchases

Micro-purchases are subject to the sustainable acquisition requirements of NASA's Purchase Card Program.

Chapter 4. Metrics and Reporting

4.1 Program Review

4.1.1 Sustainable acquisition program effectiveness shall be evaluated by EMD and the NASA Procurement Office utilizing the following:

- a. OMB Scorecard on Sustainability/Energy.
- b. NASA's Strategic Sustainability Performance Plan (SSPP).
- c. Procurement Management Reviews.
- d. Environmental and Energy Functional Reviews.
- e. NASA Environmental Tracking System (NETS) data.

4.2 External Reporting

EMD and the NASA Office of Procurement will compile the data necessary to submit the Agency's required reports per E.O. 13693, OMB Scorecards, and the FPDS.

Appendix A. Definitions

Acquisition. [As defined in FAR 2.101.](#)

Approval. Authorization by a required management official to proceed with a proposed course of action. Approvals shall be documented in writing.

Applicable. The procurement includes purchase or use of products or services for which there are Federal environmental requirements. Agencies shall ensure that it has considered the sustainable acquisition requirements of E.O. 13693. Requirements will be deemed either "applicable" or "not applicable" to the products and services purchased, including new contract actions, Indefinite Delivery, Indefinite Quantity (IDIQ) contracts, task orders against existing contracts, and goods and/or services acquired through purchase cards.

Biobased product. [As defined in FAR 2.101.](#)

Center. [As defined by NPD 1000.3, Section 1.2.1.2.](#)

Center Environmental Manager. The head of the Center Environmental Program Office as defined at each NASA Center and Component Facility.

Center Office of Procurement. The Procurement Office as defined at each NASA Center and Component Facility.

Component Facility. [As defined by NPD 1000.3, Section 1.2.1.3.](#)

Energy-efficient product.

[As defined in FAR 2.101.](#)

Energy-efficient standby power devices. [As defined in FAR 2.101.](#)

Environmental and Energy Functional Review (EEFR). A process designed to aid NASA EMD in assessing the environmental programs at NASA facilities. The EEFR process serves as a "second-party" audit with three primary objectives: (1) to examine the level of environmental compliance at the Centers; (2) to examine conformance of the NASA Environmental Management System with internal and external requirements; and (3) to comply with the requirements of E.O. 13693.

Environmentally preferable. [As defined in FAR 2.101.](#)

EPA-designated item. [As defined in FAR 23.401](#)

Exemption. Obtaining written permission or approval of supporting justification documentation (waiver) releasing the requestor or procurement team from the obligation of including sustainable acquisition requirements.

[Federal Acquisition Regulation \(FAR\).](#) The primary document in the Federal Government that contains uniform policies and procedures that govern the acquisition activity of all Federal agencies that do not have a specific exemption (such as the U.S. Postal Service). It is published in Title 48 of the Code of Federal Regulations (CFR).

Green Procurement Compilation. A comprehensive green purchasing resource created by the GSA to identify applicable green purchasing requirements.

Life-cycle cost. [As defined in E.O. 13693 implementing instructions.](#)

Market research. [As defined in FAR 2.101.](#)

Micro-purchase. [As defined in FAR 2.101.](#)

NASA Environmental Tracking System (NETS). A database that includes sustainable acquisition and solid waste diversion data for the Agency's reporting requirements.

NASA FAR Supplement (NFS). The NASA acquisition regulation which establishes Agency-wide policies and procedures for implementing and supplementing the Federal Acquisition Regulation (FAR). The NFS is at 48 CFR Chapter 18.

Non-ozone-depleting. Description of a compound that does not contribute to stratospheric ozone depletion. See definition for Significant New Alternatives Policy (SNAP).

OMB Scorecard. The means by which the OMB tracks Federal agencies' progress on E.O. and EPA goals in the areas of environmental stewardship, energy, and transportation.

Ozone depleting substance. [As defined in FAR 2.101.](#)

Performance Work Statement (PWS). A statement of work for performance-based acquisitions that describes the required results in clear, specific, and objective terms with measurable outcomes. As defined in FAR 2.101.

Procurement Information Circular (PIC). A document that is used for internal dissemination of NASA procurement-related information that clarifies existing policy.

Recycled content. Products that contain "...waste materials and byproducts which have been recovered or diverted from solid waste, but such term does not include those materials and byproducts generated from, and commonly reused within, an original manufacturing process" [42 U.S.C. 6903 (19)]. Also see definition for EPA-designated product.

Request Originator (also known as the requestor, request initiator, or person with the need to acquire a product or service). The person or organization initiating a procurement request or Government-wide commercial purchase card micro-purchase.

Safer Choice. EPA's program that helps consumers, businesses, and purchasers find products that perform well and are safer for human health and the environment.

Significant New Alternatives Policy (SNAP). EPA's program to evaluate and regulate substitutes for the ozone-depleting chemicals that are being phased out under the Clean Air Act.

SmartWay. An EPA program that helps the freight transportation sector improve supply chain efficiency. SmartWay reduces transportation-related emissions that affect climate change, reduce environmental risk for companies, and increase global energy security.

Specifications. An explicit set of requirements to be satisfied by a material, product, or service. A specification is a type of a standard that is often referenced by a contract or procurement document and provides the necessary details about the specific requirements.

Statement of Objectives (SOO). A Government-prepared document incorporated into the solicitation that states the overall performance objectives as defined in FAR 2.101. When a SOO is used, the potential contractor should respond by submitting a PWS. [As defined in FAR 37.602.](#)

Statement of Work (SOW). A document included in the solicitation and resulting contract that captures and defines the work activities, deliverables, and timeline that a contractor will execute against in performance of specified work for a client. Detailed requirements are usually included in the SOW along with standard regulatory terms and conditions.

Sustainable acquisition (formerly known as affirmative procurement). A program that requires Federal agencies to buy recycled content and biobased or other environmentally preferable products.

USDA-designated item. [As defined in FAR 23.401.](#)

Waiver. A written document recording the rationale and decision for omitting any solicitation provision or contract clause when its use is prescribed. Also referred to as justification documentation.

Water-efficient. Water efficiency means: (1) Reducing potable water consumption intensity to include low-flow fixtures and efficient cooling towers; (2) reducing agency, industry, landscaping, and agricultural water consumption; and (3) managing storm water in accordance with Section 438 of the Energy Independence and Security Act of 2007 (42 U.S.C. §17094).

Appendix B. Sustainable Acquisition Web Sites

B.1 Biobased -- <http://www.biopreferred.gov/>

B.2 Energy-efficient -- <http://www.energystar.gov/products> or
http://www1.eere.energy.gov/femp/procurement/eep_requirements.html

B.3 EPA "Recovered Materials Advisory Notices" (RMANs), published periodically in the Federal Register, as well as -- <http://www.epa.gov/waste/conserve/tools/cpg/rman-csv/index.htm>

B.4 EPA's Pollution Prevention Program -- <http://www.epa.gov/p2/>

B.5 EPA's Priority Chemical Program -- <http://www.epa.gov/osw/hazard/wastemin/priority.htm>

B.6 EPA's Safer Choice -- <http://www2.epa.gov/saferchoice>

B.7 EPA's Significant New Alternative Policy (SNAP) -- <http://www.epa.gov/ozone/snap/>

B.8 EPA's Water Sense Program -- [http://www.epa.gov/WaterSense/Energy Star](http://www.epa.gov/WaterSense/Energy_Star) or energy saving products -- <http://www.energystar.gov/products>

B.9 Environmentally preferable -- <http://www.epa.gov/epp/>

B.10 Federal Energy Management Program (FEMP) products --
http://www1.eere.energy.gov/femp/procurement/eep_requirements.html

B.11 Green Procurement Compilation -- <https://sftool.gov/greenprocurement>

B.12 Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings --
http://www.epa.gov/oaintmnt/projects/buildings_mou.htm

B.13 Laboratories for the 21st Century (Labs21), the U.S. Environmental Protection Agency, and the U.S. Department of Energy -- <http://www.i2sl.org/labs21/index.html>

B.14 Non-ozone-depleting -- <http://www.epa.gov/ozone/snap/lists/index.html>

B.15 Nontoxic or less toxic alternatives -- <http://www.epa.gov/epp/>

B.16 Recycled content -- <http://www.epa.gov/epawaste/conservation/tools/cpg/products/index.htm>

B.17 SmartWay -- <http://www.epa.gov/smartway/>

B.18 Sustainable Facilities Tool, U.S. General Services Administration -- <https://sftool.gov>

B.19 Water-efficient -- <http://www.epa.gov/watersense/>

Appendix C. References

C.1 Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety and Drug Free Work Place, 48 CFR Part 23.

C.2 Comprehensive Procurement Guideline for Products Containing Recovered Materials, EPA Regulations, 40 CFR Part 247.

C.3 NPR 8820.2, Facility Project Requirements (FPR).

C.4 NPR 8570.1, NASA Energy Management Program.

C.5 NASA Strategic Sustainability Performance Plan (SSPP).